MARK LYONS
Aries Clean Technologies – 603.498.6525 – info@ariescleantech.com
4037 Rural Plains Circle, Ste. 290 – Franklin, TN 37064

Aries Taunton Biosolids Gasification Facility

Fluidized Bed Gasification is a process that converts carbon-containing waste material into a synthetic fuel gas, along with a very small amount of inert char. Biosolids are fed into the gasifier and a controlled amount of oxygen is introduced. Once necessary temperatures are achieved, a thermo-chemical process converts the biomass into a usable syngas primarily composed of carbon monoxide, hydrogen, and methane. This sustainable fuel can be used to produce heat in a commercial dryer to remove moisture from the biosolids. The system can cleanly reduce biosolids volume by as much as 95%.

Feedstocks

- Biosolids from municipal wastewater treatment plants

Beneficial Byproducts

- Clean energy – syngas, a synthetic fuel gas for internal facility use, and
- Bio-Fly-Ash™ – a beneficial byproduct with various applications in industrial and manufactured products.

Taunton Fluidized Bed Gasification

Project Snapshot

- State of the art, patented fluidized bed facility located at the City of Taunton, Massachusetts Sanitary Landfill
- Processing 470 tons per day of biosolids
- Producing 25 tons of beneficial biochar daily
- Closed-loop system requires no fossil fuels during routine operations
- Permitting underway
- Full operations in Q2/Q3 2023

Financial Benefits

- $750,000 upfront payment at project financial close,
- $500,000 upfront payment to City to reduce sewer system infiltration and inflow,
- Annual revenue share with the City of project tip fees; City revenue share expected to be about $445,000 in the first year of the project,
- A site lease payment to the City of $100,000 per year, escalated annually,
- Most favored nation biosolids disposal pricing for the City, which is expected to save the City between $250,000 and $325,000 per year compared to market pricing
- 35 permanent well-paying jobs at the facility

Local Benefits

- Diverts up to 160,000 tons of biosolids from landfills and incinerators annually
- Cost competitive option for biosolids disposal in southern New England area
- System is carbon negative and captures methane (with a global warming impact 23 times greater than CO2) that would otherwise be released into the atmosphere
- Reduced Greenhouse Gases due to reduction in biosolids trucking to distant disposal sites
- Aries' Build-Own-Operate model provides no financial risk to City of Taunton
- Host Community Benefits to City of Taunton including low cost biosolids disposal